OCEANS PAST NEWS No.9

JULY 2018

OCEANS PAST INITIATIVE

People and the sea

Today, researchers worldwide are asking deeper and more informed questions about the relationships between human beings and the natural world. They are also increasingly reaching across disciplinary boundaries to engage these complicated, but necessary, inquiries. The study of the past is no different. While disparate in place and time, and accessing a wide range of resources and approaches, research in OPN, such as in this edition, also reveals common threads of interdisciplinary engagement to understand the intimate connection between people and the marine realm.

My dad, left, and a friend fish for wild salmon returning from the sea in an estuary along the coast of Kodiak Island, Alaska (USA).

***Emily S. Klein**, Southwest Fisheries Science Center & The Farallon Institute, USA*
OPN Editor

Illustration by Elvira Gascon in a book by Durand[1] (1950, p. 27) showing a scene were Matto the manatee, kept as a pet by the Cacique Caramatexi for 26 years, interacted with local people in his "home" lake in a 16th century Caribbean Island[2].

OCEANS PAST SPOTLIGHT*

Cristina Brito, PhD: **Manatees, bones, and stones - *The value of marine tropical animals, products, and objects in the early modern Atlantic***

Initiated in 2017, a research project on the past distribution, uses, and perceptions of manatees is taking place within the Environmental History and Sea research line at CHAM (Lisbon, Portugal), coordinated by **Cristina Brito**. The work will span five years, with a main goal of understanding how stories of humans and non-humans from the marine environment intertwined in the early modern Atlantic. Using manatees as case-studies, this project looks at early ecological practices by both local and foreign cultures as drivers of long-term exploitation that ultimately led to the extirpation and current critically endangered status of marine species.

Research on aquatic animals, peoples, and the early modern Africa and Americas have rarely been considered together, or across perspectives. In this project, different worldviews and concepts of nature will be addressed in a cross-cultural approach, focused on a time and place where both indigeneity and imperial motivations played an active role in shaping the human forces that acted upon aquatic environments and the animals that lived there. Severe anthropogenic impacts deeply changed habitats and natural populations, and altered seascapes and ways of living, up to the point where several aquatic species are now facing extinction, and this work also aims to understand how people viewed, used, and interacted with these species in the past, as well.

Each issue of Oceans Past News includes a feature article to highlight research happening in our community, as either an **Oceans Past Spotlight or as **10 Questions**, which will pose the same 10 questions to different leaders in our field. If you would like be considered for either, or to nominate a colleague or mentee, please contact Emily Klein at emily.klein04@gmail.com.*

The research is already demonstrating that the West African woman-fish or mami-wata (*Trichechus senegalensis*), the West Indies manati (*Trichechus manatus*), and the south American ox-fish or iguaragua (*Trichechus inunguis*) were equally valued and loved across regions, but the reason why varied significantly. For example, Portuguese and Spanish written sources for the 16th and 17th centuries show the different relationships peoples and individuals had with manatees, and manatees were used as an important food resource, a medicinal item, a magical object, and even as a pet. Broadly, this historical work is also revealing that, even though there are some examples of empathy towards these animals, people placed greater value on their economic, pragmatic, and symbolic use. Consequently, evidence of protection towards manatees as individuals or populations did not emerge until the late 18th century.

Present distribution and past occurrence of Trichechus *spp. Current distribution (blue, yellow and purple lines) were obtained based on IUCN shapefile (www.iucnredlist.org /technical-documents/red-list-training/iucnspatialresources) and plotted over the map by Zimmermann (1777)[3]. Map georeferenced using ESRI ARCGIS 10.5.1[4]. Symbols designate historical manatee occurrence, 16th to 19th centuries, obtained from period sources; symbols do not represent an actual georeferenced position.*

The continuous (over) exploitation of all three manatee species continued to the present, and resulted in a highly constricted distribution range and the risk of extinction today. Moreover, and despite national and international protection, manatee populations across the South Atlantic continue to suffer from deliberate hunt as bushmeat, or simply out of ignorance. This project sheds light on previous distribution and abundance, but also how people have valued these animals across cultures, with direct implications for current and future management. *~ Cristina Brito, Center for the Humanities, NOVA FCSH, Lisbon, Portugal.*

[1]*Durand, José*. Ocaso de Sirenas: Manaties en el siglo XVI. *México: Tezontle, 1950.* [2]*This work is supported by the project (IF/00610/2015) "Ngulu-maza, iguaragua or cow-fish? Local and global natural knowledge production and diffusion; practices and perceptions about marine animals in the Atlantic 1453-1786" (http://www.cham.fcsh.unl.pt/pr_descricao.aspx?ProId=68). Part of this investigation was conducted as an invited researcher at the John Carter Brown Library at Brown University.* [3]*Zimmermann, E & T. Mundi* Geographico Zoologica sistens Quadrupeds hueusque notos sedibusque suis adscriptos*. T. Haak & Soc: Leiden, 1777. (JCB Map Collection https://jcb.lunaimaging.com/luna/servlet/s/ 050i21).* [4]*Thank you to Celso Aleixo Pinto, Portuguese Agency of the Environment (APA), for his help with the map.*

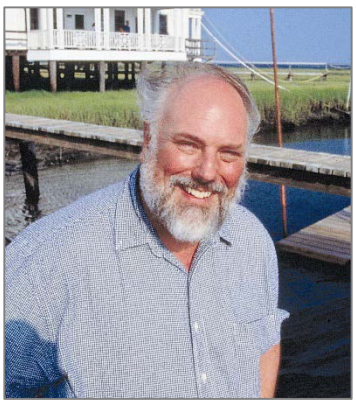

Photo: Rutgers University

FAREWELL

Professor J. Frederick Grassle passed away July 6, 2018. Fred was an eminent marine scientist, field biologist, and pioneer in the study of hydrothermal vent communities. He helped establish the Rutgers oceanographic program, and was a founder of and absolutely critical to the early development of OBIS, the Ocean Biogeographical Information System, which today enables data sharing across the globe. Fred was also the first chairperson of the **Census of Marine Life.** His vision for the Census bootstrapped global activity in marine biology between 2000 and 2010. I came to know Fred well during our ten years together at the steering committee of the Census, and I was moved by his humanity and breadth of knowledge. His support was key to the approval by the Census in 2000 of **HMAP (History of Marine Animal Populations)**. Fred saw the potential of historical investigations to renew and amplify our understanding of ocean change. We have lost a towering figure, a wonderful mentor and friend to many scientists as the numerous emerging tributes to him attest, e.g., https://en.wikipedia.org/wiki/J._Frederick_Grassle. *~ Poul Holm, Trinity College, Dublin.*